

What is claimed is:

[Claim 1] A method of converting specific-case information to general-case information, comprising the steps of:

identifying specific-case terms by scanning through at least one source document, using a computer processor;

proposing substitutions of general-case terms for the identified specific-case terms in said at least one source document, also using said computer processor; and

displaying the proposed substitutions for said at least one source document, on a computerized display device.

[Claim 2] The method of [Claim 1], said step of substituting further comprising the step of:

for all identified occurrences of a particular specific-case term, uniformly substituting a general-case term therefor.

[Claim 3] The method of [Claim 1], wherein:

said specific-case terms comprise sensitive identifying terms to be sanitized from said source document; and

said general-case terms comprise sanitization terms for concealing said sensitive identifying terms.

[Claim 4] The method of [Claim 1], further comprising the step of:

displaying a form field in connection with each proposed substitution.

[Claim 5] The method of [Claim 4], further comprising the steps of:

maintaining linkages among all form fields connected with the proposed substitutions for a particular specific-case term;

entering a new specific-case term into one of the linked form fields using a computerized input device; and

automatically filing said new specific-case term into all of the form fields linked to said one of said linked form fields.

[Claim 6] The method of [Claim 5], further comprising the steps of:

passing said linkages to a computerized form program; and
entering and automatically filling using said computerized form program.

[Claim 7] The method of [Claim 1]. said step of identifying specific-case terms further comprising the steps of:

comparing terms in said source document with names in a name database; and

identifying a term as a specific-case term based on said term matching a name in said name database.

[Claim 8] The method of [Claim 7], further comprising the step of:

deriving said name database from a corpus of a large number of documents of similar nature to said source document.

[Claim 9] The method of [Claim 1]. said step of identifying specific-case terms further comprising the steps of:

comparing terms in said source document with patterns in a pattern grammar database; and

identifying a term as a specific-case term based on said term matching a grammar pattern in said grammar pattern database.

[Claim 10] The method of [Claim 9], wherein said grammar pattern is selected from the grammar group consisting of: a city, state, zip pattern; a city, state pattern, a price pattern, a name pattern; and a date pattern.

[Claim 11] The method of [Claim 1]. said step of identifying specific-case terms further comprising the steps of:

identifying a particular section of said source document as being a section customarily containing specific-case terms; and

identifying a term as a specific-case term based on said term being located in the identified particular section at a place customarily occupied by specific-case terms.

[Claim 12] The method of [Claim 1]. said step of identifying specific-case terms further comprising the steps of:

comparing terms in said source document with terms in a collocation database; and

identifying a term as a specific-case term based on said term matching a term in said collocation database.

[Claim 13] The method of [Claim 12], further comprising the step of:

deriving said collocation database from a corpus of a large number of documents of similar nature to said source document.

[Claim 14] The method of [Claim 12], further comprising the step of:

further identifying said term as a specific-case term based on the collocation of said term being used below a predetermined usage threshold.

[Claim 15] The method of [Claim 14], further comprising the step of:

establishing said predetermined usage threshold using a computerized input device.

[Claim 16] The method of [Claim 1], said step of identifying specific-case terms further comprising the steps of:

comparing terms in said source document with terms in a rare word database; and

identifying a term as a specific-case term based on said term matching a term in said rare word database which is used below a predetermined usage threshold.

[Claim 17] The method of [Claim 16], further comprising the step of:

deriving said rare word database from a corpus of a large number of documents of similar nature to said source document.

[Claim 18] The method of [Claim 16], further comprising the step of:

establishing said predetermined usage threshold using a computerized input device.

[Claim 19] The method of [Claim 1], further comprising the step of:

classifying specific-case terms according to a plurality of types of specific-case terms;

selecting which types of specific-case terms are to be identified for proposed substitution; and

identifying for proposed substitution, only terms which fall within one of the selected types of specific-case terms.

[Claim 20] The method of [Claim 19], wherein said plurality of types of specific-case terms is selected from at least two members of the specific-case type group consisting of: names; addresses; cities; states; countries; postal codes; dates; prices; collocations rare words; and terms in sections of said source document customarily containing specific-case terms.

[Claim 21] The method of [Claim 1], further comprising the step of:

undoing a proposed substitution by designating a proposed substitution to be undone, using a computerized input device.

[Claim 22] The method of [Claim 1], further comprising the step of:

adding a substitution by designating a substitution to be added, using a computerized input device.

[Claim 23] The method of [Claim 1], further comprising the step of:

modifying a proposed substitution by designating a proposed substitution to be modified, using a computerized input device; and
entering a modification to said proposed substitution, using said computerized input device.

[Claim 24] The method of [Claim 1], further comprising the steps of:

overriding a proposed substitution;
learning from said overriding using machine learning; and
thereafter, applying said machine learning to said step of proposing substitutions.

[Claim 25] The method of [Claim 1], further comprising the steps of:

designating a proposed substitution on said computerized display device, using a computerized input device; and

in response to said designating, displaying the specific-case term for which said proposed substitution is proposed, on said computerized display device.

[Claim 26] The method of [Claim 1], further comprising the step of:

finalizing said source document into a finalized document by initiating finalization, using a computerized input device; and

thereafter, barring a computerized output of said finalized document from revealing all specific-case terms for which substitutions have been made and finalized.

[Claim 27] The method of [Claim 26], further comprising the step of:

displaying a form field in connection with each finalized substitution.

[Claim 28] The method of [Claim 27], further comprising the steps of:

maintaining linkages among all form fields connected with the finalized substitutions for a particular specific-case term;

entering a new specific-case term into one of the linked form fields using a computerized input device; and

automatically filing said new specific-case term into all of the form fields linked to said one of said linked form fields.

[Claim 29] The method of [Claim 28], further comprising the steps of:

passing said linkages to a computerized form program; and

entering and automatically filling using said computerized form program.

[Claim 30] The method of [Claim 1], further comprising the steps of:

displaying said source document on said computerized display device;

displaying within said source document, said general-case terms proposed to be substituted for said specific-case terms; and

further displaying on said computerized display device, a list of said proposed substitutions listing said general-case terms in relation to said specific-case terms for which they are proposed to be substituted.

[Claim 31] The method of [Claim 1], further comprising the steps of:

displaying at least part of said source document on said computerized display device;

displaying within said source document, said specific-case terms for which it is proposed to substitute said general-case terms;

further displaying on said computerized display device, at least part of a proposed substitution document; and

displaying within said proposed substitution document, said proposed substitutions, with said specific-case terms juxtaposed relative to said general-case terms to facilitate comparison therebetween.

[Claim 32] The method of [Claim 1], further comprising the steps of:

identifying said specific-case terms by scanning through a batch plurality of source documents, using said computer processor;

proposing substitutions of general-case terms for the identified specific-case terms in said batch plurality of source documents, also using said computer processor; and

displaying the proposed substitutions for said batch plurality of source documents, on said computerized display device.

[Claim 33] A method of interfacing a user with a computer for converting specific-case information to general-case information, comprising the steps of:

displaying a source document on a computerized display device;

displaying within said source document, general-case terms proposed to be substituted for specific-case terms originally existing in said source document, based on processing by a computer processor; and

further displaying on said computerized display device, a proposed substitution list listing said general-case terms in relation to said specific-case terms for which they are proposed to be substituted.

[Claim 34] The method of [Claim 33], further comprising the step of:

further displaying for a particular general-case term and its related specific-case term, how many times said particular general-case term is proposed to be substituted for said related specific-case term.

[Claim 35] The method of [Claim 33], further comprising the step of:

undoing a proposed substitution by designating a proposed substitution to be undone, using a computerized input device.

[Claim 36] The method of [Claim 33], further comprising the step of:

adding a substitution by designating a substitution to be added, using a computerized input device.

[Claim 37] The method of [Claim 33], further comprising the steps of:

modifying a proposed substitution by designating a proposed substitution to be modified, using a computerized input device; and
entering a modification to said proposed substitution, using said computerized input device.

[Claim 38] The method of [Claim 33], further comprising the steps of:

designating a proposed general-case term within said display of said source document, using a computerized input device; and
in response to said designating, displaying the corresponding specific-case term, on said computerized display device.

[Claim 39] The method of [Claim 33], further comprising the step of:

within said source document, for all occurrences of a particular specific-case term, displaying a uniform general-case term substitution therefor.

[Claim 40] The method of [Claim 33], further comprising the step of:

displaying a form field in connection with each general-case term proposed to be substituted for a specific-case term.

[Claim 41] The method of [Claim 40], further comprising the steps of:

entering a new specific-case term into a particular form field using a computerized input device; and
automatically filing said new specific-case term into all of the form fields which originally contained the same specific-case term as said particular form field.

[Claim 42] The method of [Claim 33], further comprising the step of:

barring a computerized output of a finalized document from revealing all specific-case terms for which substitutions have been made, once said source document has been finalized.

[Claim 43] A method of interfacing a user with a computer for converting specific-case information to general-case information, comprising the steps of:

- displaying at least part of a source document on a computerized display device;

- displaying within said source document, specific-case terms for which it is proposed to substitute general-case terms, based on processing by a computer processor;

- further displaying on said computerized display device, at least part of a proposed substitution document; and

- displaying within said proposed substitution document, said general-case terms proposed to be substituted for said specific-case terms, juxtaposed relative to said specific-case terms to facilitate comparison between said specific-case terms and said general-case terms.

[Claim 44] The method of [Claim 43], further comprising the steps of:

- displaying a subset of said source document and a corresponding subset of said proposed substitution document, showing selected particular proposed substitutions of general-case terms for specific-case terms.

[Claim 45] A method of interfacing a user with a computer for converting specific-case information to general-case information, comprising the step of:

- displaying on a computerized display device, a proposed substitution list listing general-case terms proposed to be substituted for specific-case terms originally existing in at least one source document, in relation to said specific-case terms for which they are proposed to be substituted, based on processing by a computer processor.

[Claim 46] The method of [Claim 45]:

- said at least one source document comprising a batch plurality of source documents; and

said proposed substitution list comprising proposed substitutions for said batch plurality of source documents.

[Claim 47] The method of [Claim 45], further comprising the step of:

further displaying for a particular general-case term and its related specific-case term, how many times said particular general-case term is proposed to be substituted for said related specific-case term.

[Claim 48] The method of [Claim 45], further comprising the step of:

undoing a proposed substitution by designating a proposed substitution to be undone, using a computerized input device.

[Claim 49] The method of [Claim 45], further comprising the step of:

adding a substitution by designating a substitution to be added, using a computerized input device.

[Claim 50] The method of [Claim 45], further comprising the steps of:

modifying a proposed substitution by designating a proposed substitution to be modified, using a computerized input device; and
entering a modification to said proposed substitution, using said computerized input device.

[Claim 51] A computerized apparatus for converting specific-case information to general-case information, comprising:

a computer processor identifying specific-case terms by scanning through at least one source document;

said computer processor also proposing substitutions of general-case terms for the identified specific-case terms in said at least one source document; and

a computerized display device displaying the proposed substitutions for said at least one source document.

[Claim 52] The computerized apparatus of [Claim 51], further comprising:

said computer processor uniformly substituting a general-case term for all identified occurrences of a particular specific-case term.

[Claim 53] The computerized apparatus of [Claim 51]:

said specific-case terms comprising sensitive identifying terms to be sanitized from said source document; and

said general-case terms comprising sanitization terms for concealing said sensitive identifying terms.

[Claim 54] The computerized apparatus of [Claim 51], further comprising:

said computerized display device displaying a form field in connection with each proposed substitution.

[Claim 55] The computerized apparatus of [Claim 54], further comprising:

said computerized apparatus maintaining linkages among all form fields connected with the proposed substitutions for a particular specific-case term;

a computerized input device for entering a new specific-case term into one of the linked form fields; and

said computerized apparatus automatically filing said new specific-case term into all of the form fields linked to said one of said linked form fields.

[Claim 56] The computerized apparatus of [Claim 55], further comprising:

a computerized form program receiving a passing of said linkages thereto; and

said computerized form program for said entering and said automatically filling.

[Claim 57] The computerized apparatus of [Claim 51]. further comprising:

said computer processor comparing terms in said source document with names in a name database; and

said computer processor identifying a term as a specific-case term based on said term matching a name in said name database.

[Claim 58] The computerized apparatus of [Claim 57], further comprising:

said name database, derived from a corpus of a large number of documents of similar nature to said source document.

[Claim 59] The computerized apparatus of [Claim 51]. further comprising:

said computer processor comparing terms in said source document with patterns in a pattern grammar database; and

said computer processor identifying a term as a specific-case term based on said term matching a grammar pattern in said grammar pattern database.

[Claim 60] The computerized apparatus of [Claim 59], said grammar pattern selected from the grammar group consisting of: a city, state, zip pattern; a city, state pattern, a price pattern, a name pattern; and a date pattern.

[Claim 61] The computerized apparatus of [Claim 51], further comprising:

said computer processor identifying a particular section of said source document as being a section customarily containing specific-case terms; and

said computer processor identifying a term as a specific-case term based on said term being located in the identified particular section at a place customarily occupied by specific-case terms.

[Claim 62] The computerized apparatus of [Claim 51], further comprising:

said computer processor comparing terms in said source document with terms in a collocation database; and

said computer processor identifying a term as a specific-case term based on said term matching a term in said collocation database.

[Claim 63] The computerized apparatus of [Claim 62], further comprising:

said collocation database, derived from a corpus of a large number of documents of similar nature to said source document.

[Claim 64] The computerized apparatus of [Claim 62], further comprising:

said computer processor further identifying said term as a specific-case term based on the collocation of said term being used below a predetermined usage threshold.

[Claim 65] The computerized apparatus of [Claim 64], further comprising:

a computerized input device for establishing said predetermined usage threshold.

[Claim 66] The computerized apparatus of [Claim 51], further comprising:

said computer processor comparing terms in said source document with terms in a rare word database; and

said computer processor identifying a term as a specific-case term based on said term matching a term in said rare word database which is used below a predetermined usage threshold.

[Claim 67] The computerized apparatus of [Claim 66], further comprising:

said rare word database, derived from a corpus of a large number of documents of similar nature to said source document.

[Claim 68] The computerized apparatus of [Claim 66], further comprising:

a computerized input device for establishing said predetermined usage threshold.

[Claim 69] The computerized apparatus of [Claim 51], further comprising:

said computerized apparatus classifying specific-case terms according to a plurality of types of specific-case terms;

said computer processor selecting which types of specific-case terms are to be identified for proposed substitution; and

said computer processor identifying for proposed substitution, only terms which fall within one of the selected types of specific-case terms.

[Claim 70] The computerized apparatus of [Claim 69], said plurality of types of specific-case terms selected from at least two members of the specific-case type group consisting of: names; addresses; cities; states; countries; postal codes; dates; prices; collocations rare words; and terms in sections of said source document customarily containing specific-case terms.

[Claim 71] The computerized apparatus of [Claim 51], further comprising:

a computerized input device for undoing a proposed substitution by designating a proposed substitution to be undone.

[Claim 72] The computerized apparatus of [Claim 51], further comprising:

a computerized input device for adding a substitution by designating a substitution to be added.

[Claim 73] The computerized apparatus of [Claim 51], further comprising:

a computerized input device for modifying a proposed substitution by designating a proposed substitution to be modified; and

said computerized input device for entering a modification to said proposed substitution.

[Claim 74] The computerized apparatus of [Claim 51], further comprising:

a computerized input device for overriding a proposed substitution;

a machine learning program learning from said overriding; and

said machine learning program thereafter applying said machine learning to said computer processor proposing substitutions.

[Claim 75] The computerized apparatus of [Claim 51], further comprising:

a computerized input device for designating a proposed substitution on said computerized display device; and

said computerized display device, in response to said designating, displaying the specific-case term for which said proposed substitution is proposed.

[Claim 76] The computerized apparatus of [Claim 51], further comprising:

a computerized input device for initiating finalization and thereby finalizing said source document into a finalized document; and

thereafter, said computerized apparatus barring a computerized output of said finalized document from revealing all specific-case terms for which substitutions have been made and finalized.

[Claim 77] The computerized apparatus of [Claim 76], further comprising:

said computerized display device displaying a form field in connection with each finalized substitution.

[Claim 78] The computerized apparatus of [Claim 77], further comprising:

said computerized apparatus maintaining linkages among all form fields connected with the finalized substitutions for a particular specific-case term;

a computerized input device for entering a new specific-case term into one of the linked form fields; and

said computerized apparatus automatically filing said new specific-case term into all of the form fields linked to said one of said linked form fields.

[Claim 79] The computerized apparatus of [Claim 78], further comprising:

a computerized form program receiving a passing of said linkages thereto; and

said computerized form program for said entering and said automatically filling.

[Claim 80] The computerized apparatus of [Claim 51], further comprising:

said computerized display device displaying said source document;

said computerized display device displaying within said source document, said general-case terms proposed to be substituted for said specific-case terms; and

said computerized display device further displaying a list of said proposed substitutions listing said general-case terms in relation to said specific-case terms for which they are proposed to be substituted.

[Claim 81] The computerized apparatus of [Claim 51], further comprising:

said computerized display device displaying at least part of said source document;

said computerized display device displaying within said source document, said specific-case terms for which it is proposed to substitute said general-case terms;

said computerized display device further displaying at least part of a proposed substitution document; and

said computerized display device displaying within said proposed substitution document, said proposed substitutions, with said specific-case terms juxtaposed relative to said general-case terms to facilitate comparison therebetween.

[Claim 82] The computerized apparatus of [Claim 51], further comprising:

said computer processor identifying said specific-case terms by scanning through a batch plurality of source documents;

said computer processor also proposing substitutions of general-case terms for the identified specific-case terms in said batch plurality of source documents; and

said computerized display device displaying the proposed substitutions for said batch plurality of source documents.

[Claim 83] A computerized apparatus for interfacing a user with a computer for converting specific-case information to general-case information, comprising:

a computerized display device displaying a source document;

said computerized display device displaying within said source document, general-case terms proposed to be substituted for specific-case terms originally existing in said source document, based on processing by a computer processor; and

said computerized display device further displaying a proposed substitution list listing said general-case terms in relation to said specific-case terms for which they are proposed to be substituted.

[Claim 84] The computerized apparatus of [Claim 83], further comprising:

said computerized display device further displaying for a particular general-case term and its related specific-case term, how many times said particular general-case term is proposed to be substituted for said related specific-case term.

[Claim 85] The computerized apparatus of [Claim 83], further comprising:

a computerized input device for undoing a proposed substitution by designating a proposed substitution to be undone.

[Claim 86] The computerized apparatus of [Claim 83], further comprising:

a computerized input device for adding a substitution by designating a substitution to be added.

[Claim 87] The computerized apparatus of [Claim 83], further comprising:

a computerized input device for modifying a proposed substitution by designating a proposed substitution to be modified; and

said computerized input device for entering a modification to said proposed substitution.

[Claim 88] The computerized apparatus of [Claim 83], further comprising:

a computerized input device for designating a proposed substitution on said computerized display device; and

said computerized display device, in response to said designating, displaying the specific-case term for which said proposed substitution is proposed.

[Claim 89] The computerized apparatus of [Claim 83], further comprising:

said computerized display device displaying a uniform general-case term substitution for all occurrences of a particular specific-case term within said source document.

[Claim 90] The computerized apparatus of [Claim 83], further comprising:

said computerized display device displaying a form field in connection with each general-case term proposed to be substituted for a specific-case term.

[Claim 91] The computerized apparatus of [Claim 90], further comprising:

a computerized input device for entering a new specific-case term into a particular form field; and

said computerized apparatus automatically filing said new specific-case term into all of the form fields which originally contained the same specific-case term as said particular form field.

[Claim 92] The computerized apparatus of [Claim 83], further comprising:

said computerized apparatus barring a computerized output of a finalized document from revealing all specific-case terms for which substitutions have been made, once said source document has been finalized.

[Claim 93] A computerized apparatus for interfacing a user with a computer for converting specific-case information to general-case information, comprising:

a computerized display device displaying at least part of a source document;

said computerized display device displaying within said source document, specific-case terms for which it is proposed to substitute general-case terms, based on processing by a computer processor;

said computerized display device further displaying at least part of a proposed substitution document; and

said computerized display device displaying within said proposed substitution document, said general-case terms proposed to be substituted for said specific-case terms, juxtaposed relative to said specific-case terms to facilitate comparison between said specific-case terms and said general-case terms.

[Claim 94] The computerized apparatus of [Claim 93], further comprising:

said computerized display device displaying a subset of said source document and a corresponding subset of said proposed substitution document, showing selected particular proposed substitutions of general-case terms for specific-case terms.

[Claim 95] A computerized apparatus for interfacing a user with a computer for converting specific-case information to general-case information, comprising:

a computerized display device displaying a proposed substitution list listing general-case terms proposed to be substituted for specific-case terms originally existing in at least one source document, in relation to said specific-case terms for which they are proposed to be substituted, based on processing by a computer processor.

[Claim 96] The computerized apparatus of [Claim 95]:

said at least one source document comprising a batch plurality of source documents; and

said proposed substitution list comprising proposed substitutions for said batch plurality of source documents.

[Claim 97] The computerized apparatus of [Claim 95], further comprising:

said computerized display device further displaying for a particular general-case term and its related specific-case term, how many times said particular general-case term is proposed to be substituted for said related specific-case term.

[Claim 98] The computerized apparatus of [Claim 95], further comprising:

a computerized input device for undoing a proposed substitution by designating a proposed substitution to be undone.

[Claim 99] The computerized apparatus of [Claim 95], further comprising:

a computerized input device for adding a substitution by designating a substitution to be added.

[Claim 100] The computerized apparatus of [Claim 95], further comprising:

a computerized input device for modifying a proposed substitution by designating a proposed substitution to be modified; and

said computerized input device for entering a modification to said proposed substitution.

[Claim 101] A computer-readable medium comprising computer-executable instructions for:

identifying specific-case terms by scanning through at least one source document, using a computer processor;

proposing substitutions of general-case terms for the identified specific-case terms in said at least one source document, also using said computer processor; and

displaying the proposed substitutions for said at least one source document, on a computerized display device.

[Claim 102] A computer-readable medium comprising computer-executable instructions for:

displaying a source document on a computerized display device;

displaying within said source document, general-case terms proposed to be substituted for specific-case terms originally existing in said source document, based on processing by a computer processor; and

further displaying on said computerized display device, a proposed substitution list listing said general-case terms in relation to said specific-case terms for which they are proposed to be substituted.

[Claim 103]A computer-readable medium comprising computer-executable instructions for:

- displaying at least part of a source document on a computerized display device;

- displaying within said source document, specific-case terms for which it is proposed to substitute general-case terms, based on processing by a computer processor;

- further displaying on said computerized display device, at least part of a proposed substitution document; and

- displaying within said proposed substitution document, said general-case terms proposed to be substituted for said specific-case terms, juxtaposed relative to said specific-case terms to facilitate comparison between said specific-case terms and said general-case terms.

[Claim 104]A computer-readable medium comprising computer-executable instructions for:

- displaying on a computerized display device, a proposed substitution list listing general-case terms proposed to be substituted for specific-case terms originally existing in at least one source document, in relation to said specific-case terms for which they are proposed to be substituted, based on processing by a computer processor.